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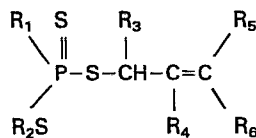
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(54) **S-(substituted allylic) trithiophosphonate insecticides.**

(57) Compounds and compositions containing them, for insecticidal control, particularly for use as soil and/or foliar insecticides, have the formula



in which

R_1 is $\text{C}_1\text{-C}_3$ alkyl;
 R_2 is $\text{C}_1\text{-C}_6$ alkyl or $\text{C}_5\text{-C}_6$ cycloalkyl;
 R_3 is hydrogen or $\text{C}_1\text{-C}_3$ alkyl;
 R_4 is hydrogen, $\text{C}_1\text{-C}_4$ alkyl, phenyl, halogen or halo-($\text{C}_1\text{-C}_4$ alkyl); and
 R_5 and R_6 are independently hydrogen, halogen, $\text{C}_1\text{-C}_4$ alkyl, phenyl, or $\text{C}_2\text{-C}_5$ carboalkoxy; or
 R_3 and R_5 taken together form a trimethylene group; provided that if R_3 , R_5 and R_6 are all hydrogen, R_4 is not hydrogen; together with insecticidal compositions containing such compounds, and methods for controlling insects.



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
A	EP-A-0 022 141 (MONSANTO) * claim 1, example 53 *	1	C 07 F 9/40 A 01 N 57/20
A	DE-A-2 246 759 (STAUFFER CHEMICAL)	1	
A	CHEMICAL ABSTRACTS, vol. 69, no. 11, 9th September 1968, pages 4127-4128, abstract no. 43993t, Columbus, Ohio, US; E.A. KRASIL'NIKOVA et al.: "Derivatives of phosphonous and phosphonic acids. XLIX. Reaction of dithioesters of alkylphosphonous acids with alkyl halides", & ZH. OBSHCH. KHIM. 1968, 38(3), 609-613	1	
A	CHEMICAL ABSTRACTS, vol. 68, no. 19, 6th May 1968, page 6427, abstract no. 87345s, Columbus, Ohio, US; O.N. GRISHINA et al.: Alkylthionophosphonates. VII. Synthesis of mixed esters of alkyltrithiophosphonic acids", & ZH. OBSHCH. KHIM 1967, 37(10), 2276-2278	1	TECHNICAL FIELDS SEARCHED (Int. Cl. 4) C 07 F 9/40 A 01 N 57/20
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 11-06-1986	Examiner KAPTEYN H G
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			